

~~SECRET~~

T+P

MESSAGE NO. A-29

OCTOBER 17, 1956

FROM: R-W

TO: HEADQUARTERS

INFO: [REDACTED]

25X1A

DOCUMENT NO. _____
NO CHANGE IN CLASS. ☐
CLASSIFIED BY _____
CLASS. CHANGED TO: _____
REVIEW DATE: _____
REVIEWER: 037169
12/11/71

1. SYSTEM 1 - NO ADDITIONAL INFORMATION AT THIS TIME.
2. SYSTEM 2 - MINOR MODIFICATIONS BEING MADE TO FIRST THREE COMPLETE AIRBORNE EQUIPMENTS. THESE CONSIST OF PINNING MOTOR SHAFTS IN THE TRANSMITTER AND TUNING UNITS, MODIFYING TRANSMITTER SERVO AMPLIFIER UNITS TO REPLACE LUTHER RELAYS WHICH WERE UNSATISFACTORY, REPLACING ALL TRANSISTERS FOUND TO EXHIBIT LOW ZENER BREAKDOWN, AND MINOR CORRECTIONS TO PRINTER UNITS. THIS WORK WILL BE COMPLETED BY OR BEFORE 23 OCTOBER AS WILL ASSEMBLY OF THE SYSTEM 2 SIMULATOR.
3. TESTING OF THE SECOND BASE STATION EQUIPMENT WAS COMPLETED ON 12 OCTOBER, AND THIS EQUIPMENT IS NOW BEING PACKED FOR SHIPMENT. ALL CHASSIS HAVE BEEN REMOVED FROM CABINETS TO MINIMIZE CHANCE FOR DAMAGE DURING SHIPMENT. THIS EQUIPMENT INTENDED FOR WASHINGTON AREA INSTALLATION.
4. PROTOTYPE OF PROPAGATION DISPLAY UNIT NOW COMPLETED AND READY FOR TEST AT [REDACTED] 25X1A

~~SECRET~~

~~SECRET~~

Approved For Release 2000/09/01 : CIA-RDP81B00878R000200050113-5

MESSAGE NO. A-29 (CONT'D)

- 2 -

OCTOBER 17, 1956

5. SYSTEM 3 - THREE RECEIVERS ARE NOW UNDER TEST AND WILL BE READY FOR DELIVERY THIS WEEKEND. FOUR MORE SYSTEMS ARE IN ASSEMBLY AND TWO OF THESE WILL BE SENT INTO TEST NEXT WEEK. THOSE TWO RECEIVERS SHOULD BE READY FOR DELIVERY ON 29 OCTOBER. THE REMAINING TWO RECEIVERS ARE SCHEDULED FOR COMPLETION OF TEST BY 2 NOVEMBER AND WILL BE SHIPPED IMMEDIATELY THEREAFTER.
6. FOLLOWING SHIPMENT OF THESE FIRST NINE RECEIVERS, THERE WILL BE A GAP IN DELIVERIES DUE TO INABILITY OF VENDORS TO DELIVER I-F TRANSFORMERS WHICH, IN TURN, DELAYS COMPLETION OF FABRICATION AND TESTING OF I-F STRIPS BY R-S ELECTRONICS COMPANY. RECEIVERS IDENTIFIED BY SERIAL NUMBER 10 AND ABOVE WILL BE IN TEST BY THE END OF NOVEMBER AND, ASSUMING NO FURTHER VENDOR DELAYS, WILL BE DELIVERED THEREAFTER AT THE RATE OF TWO PER WEEK.
7. SYSTEM 4 - EXCELLENT PROGRESS ON DEVELOPMENT CONTINUES. CHANGES IN ANTENNA LOBING TECHNIQUES TO MEET LOBING PATTERN SUGGESTED BY SEARS AND WILLIS ARE BEING INCORPORATED. DETAILING ON ALL PARTS OF BAND 1 RECEIVER IS ESSENTIALLY COMPLETE AND PACKAGING DESIGN IS IN PROGRESS. SOME WORK STILL BEING PERFORMED ON DESIGN OF R-F HEAD AND ASSOCIATED GEAR TRAIN. DESIGN OF RECEIVER ASSEMBLY UTILIZING APR-13 HEADS PROGRESSING ON SCHEDULE. DESIGN OF

Approved For Release 2000/09/01 : CIA-RDP81B00878R000200050113-5

~~SECRET~~

SECRET

Approved For Release 2000/09/01 : CIA-RDP81B00878R000200050113-5

MESSAGE NO. A-29 (CONT'D)

- 3 -

OCTOBER 17, 1956

RECEIVER ASSEMBLY EMPLOYING APR-9 HEADS IS PRACTICALLY COMPLETED AND DRAWINGS WILL BE RELEASED TO SHOP THIS WEEK FOR FABRICATION. SOME WORK STILL BEING DONE ON GEAR TRAIN MODIFICATION.

8. BREADBOARD ASSEMBLY OF TAPE TRANSPORT UNIT NOW BEING WIRED WITH PLANS TO START TESTING THIS WEEK. DESIGN OF POWER SUPPLY EQUIPMENT FOR SYSTEM IS NOW UNDER WAY.
9. THE CHARACTERISTICS OF FIBREGLAS FOR USE IN RADOME WINDOWS HAVE BEEN DETERMINED AND FOUND TO BE SATISFACTORY FOR THE 10 TO 40 KMC BAND. LOCKHEED HAS BEEN GIVEN A RELEASE TO START FABRICATION OF THE RADOME EMPLOYING FIBREGLAS WINDOWS WHERE NEEDED. THEY ARE PREPARING A PRINT SHOWING FINAL DESIGN DETAILS.
10. STRESS ANALYSIS OF EQUIPMENT MOUNTING FRAMEWORK HAS BEEN COMPLETED AND HAS LED TO CONSIDERABLE REDUCTION IN ANTICIPATED WEIGHT. FRAMEWORK NOW BEING DETAILED FOR FABRICATION.
11. PRELIMINARY LAYOUT UNDER WAY ON WIRING HARNESS FOR SYSTEM AND INFORMATION BEING SECURED FROM ALL EQUIPMENT GROUPS TO PERMIT PREPARATION OF COMPLETE INTERCONNECTION DRAWING.

Approved For Release 2000/08/01 : CIA-RDP81B00878R000200050113-5

SECRET

~~SECRET~~

Approved For Release 2000/09/01 : CIA-RDP81B00878R000200050113-5

MESSAGE NO. A-29 (CONT'D)

- 4 -

OCTOBER 17, 1956

12. GROUND SUPPORT EQUIPMENT - WORK HAS BEEN ACTIVATED ON DESIGN OF SYSTEM 4 TEST SET. DATA DERIVED FROM THIS ACTIVITY WILL LEAD TO PREPARATION OF PROPOSAL COVERING THIS EQUIPMENT.

25X1A

13. SEVERAL DISCUSSIONS HELD WITH [REDACTED] CONCERNING REQUIREMENTS FOR SYSTEM 4 GROUND DATA REDUCTION EQUIPMENT. PHILOSOPHY UNDERLYING THIS EQUIPMENT AND PROPOSED BY [REDACTED] IS BEING SCRUTINIZED CAREFULLY WITH OBJECTIVE OF SECURING MAXIMUM PERFORMANCE WHILE MINIMIZING NEEDS FOR DEVELOPMENT OF HIGHLY SPECIALIZED COMPLEX EQUIPMENT. FURTHER CONSULTATION WITH [REDACTED] AND POSSIBLY [REDACTED] PROBABLY NECESSARY TO DETERMINE BEST COMPROMISE BETWEEN EQUIPMENT COMPLEXITY AND COST, AND TO RESOLVE SOME QUESTIONS RELATING TO METHODS OF DATA ANALYSIS.

25X1A9a

25X1A

14. TESTING OF SECOND F UNIT WAS COMPLETED 15 OCTOBER, AND UNIT WAS PACKED FOR SHIPMENT YESTERDAY. THIRD A UNIT NOW UNDER TEST. THIRD B-1 UNIT HAS BEEN COMPLETELY TESTED. THIRD B-2 UNIT NEARING COMPLETION OF ASSEMBLY. THIRD C UNIT IN TEST. THIRD F UNIT NEARING COMPLETION OF ASSEMBLY AND SCHEDULED FOR TEST 24 OCTOBER.

Approved For Release 2000/09/01 : CIA-RDP81B00878R000200050113-5

~~SECRET~~